

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN**

UNITED STATES OF AMERICA,

Plaintiff,

and

NATURAL RESOURCES DEFENSE  
COUNCIL, INC. AND SIERRA CLUB,

Intervenor-Plaintiffs,

v.

DTE ENERGY COMPANY AND  
DETROIT EDISON COMPANY,

Defendants.

Civil Action No.  
2:10-cv-13101-BAF-RSW

Judge Bernard A. Friedman

Magistrate Judge R. Steven Whalen

**DEFENDANTS' REPLY IN RESPONSE TO  
INTERVENOR-PLAINTIFFS' OPPOSITION TO DEFENDANTS' MOTION  
TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE  
OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")**

The arguments in Intervenor-Plaintiffs' opposition to Detroit Edison's RMRR Motion (Doc. No. 125) are not materially different from those rejected by the majority of courts. Those courts have found that the Government's litigation position conflicts with EPA's established interpretation, which judges RMRR by reference to "whether that type of equipment has been repaired or replaced by *sources within the relevant industrial category*." 57 Fed. Reg. 32,314, 32,326 (July 21, 1992) (emphasis added). Like the Government, Intervenor-Plaintiffs ignore the plain language of this official statement—as well as decades of other EPA statements and conduct—and instead primarily rely upon the Seventh Circuit's decision in *Wis. Elec. Power Co. v. Reilly*, 893 F.2d 901 (7th Cir. 1990), and two decisions from the D.C. Circuit to support the argument that RMRR *must* be construed narrowly to cover only "*de minimis*" activities. Doc. No. 125 at 3-6. Detroit Edison has explained the error of these arguments at length, and will not repeat that explanation here. *See, e.g.*, Doc. Nos. 116 and 127. Rather, Detroit Edison submits this reply to respond to Intervenor-Plaintiffs' arguments that (1) Congress intended that all exiting units would eventually trigger New Source Review ("NSR"), and thus Monroe Unit 2's alleged "initial reprieve" from NSR has now expired; and (2) Detroit Edison improperly relies upon *Nat'l Parks Conservation Ass'n, Inc. v. TVA*, No. 3:01-CV-71, 2010 WL 1291335 (E.D. Tenn. Mar. 31, 2010) ("*NPCA v. TVA*") in light of a settlement that was reached in that case. Intervenor-Plaintiffs are mistaken on both counts.

## **ARGUMENT**

### **I. CONGRESS DID NOT INTEND TO SUBJECT EVERY EXISTING MAJOR SOURCE TO NSR PERMITTING REQUIREMENTS.**

Intervenor-Plaintiffs' claim that Congress intended that "all plants would eventually be subject to NSR" ignores the law, as well as the history and purpose of NSR. Doc. No. 125 at 2-3. As EPA has explained, NSR is not intended as a driver for decreasing emissions from existing sources. 70 Fed. Reg. 61,081, 61,088 (Oct. 20, 2005) ("[T]he primary purpose of the major NSR

program is *not* to reduce emissions, but to balance the need for environmental protection and economic growth. *That is, the goal of major NSR is to minimize emissions increases from new source growth.*") (emphasis added). Rather, substantial emission reductions have been and will continue to be achieved by subjecting existing sources (like Detroit Edison's sources) to a host of other *non-NSR* Clean Air Act ("CAA") programs. These include state implementation plans that are specifically designed to meet or exceed federal air quality standards, 42 U.S.C. § 7410; visibility protection programs, *id.* §§ 7491-92; and the Title IV Acid Rain Program, *id.* §§ 7651-7651o—all of which are more efficient at reducing emissions and improving air quality than NSR. *See* 70 Fed. Reg. at 61,083 ("the substantial emissions reductions from other CAA requirements that are more efficient than major NSR"). These are the programs that effectively control emissions from existing sources, yet Intervenor-Plaintiffs (and the Government) act as if they do not exist.

The circumstances surrounding Congress' adoption of just one of these non-NSR programs—the Acid Rain Program—confirms that Congress never envisioned NSR as a driver for the kind of significant emissions reductions Intervenor-Plaintiffs say it must produce. The Acid Rain Program was added to the CAA in 1990, more than a decade after Congress passed NSR in 1977. Pub. L. No. 101-549, 104 Stat. 2399, 2584 (1990) (codified at 42 U.S.C. §§ 7651-7651o). Congress established in the statute new emissions limits reflecting a fundamental premise that NSR could not be expected to achieve the desired emissions reductions from existing sources. *Id.* In fact, EPA told Congress that new legislation was needed to deal with existing sources:

Some have suggested that the existing law is adequate to deal with interstate pollution. The most persuasive argument that it is not, is the EPA's own analysis of the options available under existing law.

S. REP. NO. 101-228, at 289-90 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3672-73. Following EPA's advice, Congress enacted Title IV to require electric utility industry-wide emissions

reductions—SO<sub>2</sub> emissions by 10 million tons per year and NO<sub>x</sub> emissions by 2 million tons per year from 1980 levels. 42 U.S.C. § 7651(b).

Remarkably, the Acid Rain Program is the antithesis of the program that would exist if the Intervenor-Plaintiffs were correct in their contention that Congress intended that “all plants would eventually be subject to NSR.” The program imagined by Plaintiff-Intervenors is the ultimate “command-and-control” program—one under which *all* power plant units would have long ago installed extremely costly control equipment, such as scrubbers for SO<sub>2</sub> control and selective catalytic reduction for NO<sub>x</sub> control, regardless of air quality needs and regardless of cost-effectiveness. The Acid Rain Program, by contrast, is a *market-based* program, under which Congress established industry-wide reduction goals to achieve air quality goals but left it to the industry to achieve those reductions in the most cost-effective way possible through the use of emissions “allowances.” Under that program, utilities installed expensive controls where it was most cost-effective to install such controls, and otherwise used the market-based allowance trading system to achieve the required industry-wide reductions. *See, e.g.,* Byron Swift, *Emission Trading and Hot Spots: A Review of the Major Programs*, Daily Env’t Rep. (BNA) No. 89 (May 10, 2004), at 3 (“The cap-and-trade approach [of the Acid Rain Program] fundamentally changes the regulatory system away from traditional end-of-pipe rate-based standards and into an overall performance system. These programs have been shown to reduce the costs of compliance to half or less of the cost of traditional rate-based standards.”) (footnote and citations omitted) (excerpt attached as Ex. 1). As EPA has touted, the Acid Rain Program was an “innovative, market-based control program” that “air pollution control experts from a wide range of perspectives agree ... is one of the most successful environmental programs in U.S. history.” U.S. EPA, ACID RAIN PROGRAM 2004 PROGRESS REPORT: 10 YEARS OF ACHIEVEMENT, at 2 (Oct. 2005) (available at <http://epa.gov/airmarkets/progress/docs/2004report.pdf>).

In short, Title IV and other non-NSR programs are working, and neither the Government nor Intervenor-Plaintiffs allege that Detroit Edison has violated any of them. *See, e.g.*, Doc. No. 46-4 ¶¶ 7-9 (discussing substantial emissions reductions at Monroe and billions of dollars of installed and planned pollution control equipment at the plant). Rather, under their (and the Government's) current view of NSR, *every* existing unit should have shut down or installed new emissions controls long ago, regardless of whether such controls are even needed to meet or maintain EPA-established air quality standards. *See, e.g.*, Doc. No. 114 at 1 (“Defendants seek a free pass from the New Source Review program.”); Hr’g Tr. (Jan. 19, 2011) at 9:12-14 (“Detroit Edison is asking for a four-year holiday from ... New Source Review”). This is not compatible with the policy decisions Congress made for controlling utility industry emissions. *See, e.g.*, 68 Fed. Reg. 61,248, 61,269, 61,273 (Oct. 27, 2003) (“[N]othing in the legislative history of the 1977 Amendments, which created the NSR program, ... suggest[s] that Congress intended to force all then-existing sources to go through NSR.”). Nor is it compatible with the position EPA recently expressed outside of the litigation context:

An existing source—whether grandfathered or not—triggers NSR only if it makes a physical or operational change that results in an emissions increase. Thus, a facility can conceivably continue to operate indefinitely without triggering NSR—making as many physical or operational changes as it desires—as long as the changes do not result in emissions increases.

68 Fed. Reg. at 61,273 (emphasis added). Plaintiff-Intervenors’ argument should be rejected because—as EPA put it—an interpretation under which “all major facilities eventually trigger NSR ... cannot be squared with the plain language of the CAA.” *Id.*

## **II. TVA’S GLOBAL SETTLEMENT DOES NOT AFFECT THE VALIDITY OF THE DISTRICT COURT’S ORDER DISMISSING THE NSR CASE AGAINST IT.**

Intervenor-Plaintiffs also claim that Detroit Edison’s reliance on *Nat’l Parks Conservation Ass’n, Inc. v. TVA*, No. 3:01-CV-71, 2010 WL 1291335 (E.D. Tenn. Mar. 31, 2010), as sup-

port for the majority view on RMRR is “especially spurious” in light of a settlement that was reached after they and another plaintiff lost the case at the district court and appealed it to the Sixth Circuit. Doc. No. 125 at 9 n.6. Not so.<sup>1</sup> The decision in *NPCA v. TVA* has not been vacated, and the subsequent settlement does nothing to undercut the validity or reasoning of that order, which found after a bench trial that the replacement of tube components (there, an economizer and a superheater) qualified as RMRR. See *Matter of Mem’l Hosp. of Iowa Cnty., Inc.*, 862 F.2d 1299, 1300 (7th Cir. 1988) (“[A]n opinion is a public act of the government, which may not be expunged by private agreement. History cannot be rewritten. There is no common law writ of erasure.”); *McIntyre v. Aetna Life Ins. Co.*, No. 3:08-cv-00029, 2009 U.S. Dist. LEXIS 36163, \*8 (W.D. Va. Apr. 29, 2009) (“The settlement the parties have reached in this matter does not change the factual allegations that were presented to the Court or the legal reasoning and analysis supporting the opinions and orders ....”).

### CONCLUSION

Detroit Edison’s RMRR Motion (Doc. No. 116) should be granted.

Respectfully submitted, this 10th day of August 2011.

By: /s/ F. William Brownell

F. William Brownell (bbrownell@hunton.com)  
Hunton & Williams LLP | 2200 Pennsylvania Ave., N.W.  
Washington, D.C. 20037-1701 | (202) 955-1500

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<sup>1</sup> What is spurious is Intervenor-Plaintiffs’ claim that the TVA settlement somehow undercuts the court’s decision, and the apparent suggestion that the Eastern District of Tennessee case that they had lost in the district court somehow played a substantial role in the TVA settlement. *NCPA v. TVA* involved one unit at one plant—the Bull Run power plant in Tennessee. TVA chose to enter into a “global” settlement—one that covers TVA’s *entire system*, 59 units at 11 power plants—with EPA, the States of Alabama, Kentucky, North Carolina, Tennessee, as well as the environmental groups that brought the unsuccessful *NCPA v. TVA* case. Jumping to the conclusion that the TVA global settlement undercuts a district court’s reasoned opinion in *NCPA v. TVA* is not warranted.

Matthew J. Lund (P48632)  
Pepper Hamilton LLP  
100 Renaissance Center, 36<sup>th</sup> Floor  
Detroit, Michigan 48243  
lundm@pepperlaw.com  
(313) 393-7370

Michael J. Solo (P57092)  
Office of the General Counsel  
DTE Energy, One Energy Plaza  
Detroit, Michigan  
solom@dteenergy.com  
(313) 235-9512

F. William Brownell  
Mark B. Bierbower  
Makram B. Jaber  
Hunton & Williams LLP  
2200 Pennsylvania Ave., N.W.  
Washington, D.C. 20037-1701  
bbrownell@hunton.com  
mbierbower@hunton.com  
mjaber@hunton.com  
(202) 955-1500

Brent A. Rosser  
Hunton & Williams LLP  
Bank of America Plaza, Suite 3500  
101 South Tryon Street  
Charlotte, North Carolina 28280  
brosser@hunton.com  
(704) 378-4700

Harry M. Johnson, III  
George P. Sibley, III  
Hunton & Williams LLP  
951 E. Byrd Street  
Richmond, Virginia 23219  
pjohnson@hunton.com  
gsibley@hunton.com  
(804) 788-8200

*Counsel for Defendants*

**CERTIFICATE OF SERVICE**

I hereby certify that on August 10, 2011, the foregoing **DEFENDANTS' REPLY IN RESPONSE TO INTERVENOR-PLAINTIFFS' OPPOSITION TO DEFENDANTS' MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")** was served electronically only on the following attorneys of record in accordance with an agreement reached among the parties:

Ellen E. Christensen  
U.S. Attorney's Office  
211 W. Fort Street  
Suite 2001  
Detroit, MI 48226  
313-226-9100  
Email: ellen.christensen@usdoj.gov

James A. Lofton  
Thomas Benson  
Justin A. Savage  
Kristin M. Furrie  
James Beers, Jr.  
Elias Quinn  
U.S. Department of Justice  
Environmental and Natural Resource Div.  
Ben Franklin Station  
P.O. Box 7611  
Washington, DC 20044  
202-514-5261  
Email: thomas.benson@usdoj.gov  
justin.savage@usdoj.gov  
kristin.furrie@usdoj.gov  
jim.lofton@usdoj.gov  
james.beers@usdoj.gov  
elias.quinn@usdoj.gov

Holly Bressett  
Sierra Club Environmental Law Program  
85 Second St., 2nd Floor  
San Francisco, CA 94105  
Phone: (415) 977-5646  
Email: Holly.Bressett@sierraclub.org

/s/ F. William Brownell



**EXHIBIT 1**  
**TO DEFENDANTS' REPLY**  
**IN RESPONSE TO**  
**INTERVENOR-**  
**PLAINTIFF'S OPPOSITION**  
**TO DEFENDANTS'**  
**MOTION TO ESTABLISH**  
**CORRECT LEGAL**  
**STANDARD ON THE**  
**ISSUE OF "ROUTINE**  
**MAINTENANCE, REPAIR**  
**AND REPLACEMENT"**  
**("RMRR")**



## Daily Environment Report<sup>TM</sup>

Source: Daily Environment Report: News Archive > 2004 > May > 05/10/2004 > Analysis & Perspective > Emissions Trading and Hot Spots: A Review of the Major Programs

89 DEN B-1

### **AIR POLLUTION EMISSIONS TRADING**

*This report examines whether the major U.S. emissions trading programs for air pollutants have contributed to elevated emissions concentrations in specific geographic areas, or pollution "hot spots." The author of this analysis says his assessment of the actual performance of these programs shows that none has resulted in a regional shift of emissions and that all trading programs examined have led to proportionately greater emissions reductions from the larger sources. Overall, the author finds, the data from the programs reviewed indicate trading has not created geographic hot spots and, in promoting reductions at the largest plants, has smoothed out pollutant emissions instead of concentrating them.*

### **Emissions Trading and Hot Spots: A Review of the Major Programs**

**By Byron Swift**

*This report was authored by Environmental Law Institute Senior Attorney Byron Swift (swift@eli.org), with assistance from Sara Yeatman, Nick Gayeski, and Jeremy Shays. ELI would also like to thank the representatives of government agencies, nongovernmental organizations, and private firms who generously provided comments and information for this report.*

*Although the research in this document has been funded in part by the Environmental Protection Agency under Cooperative Agreement CR-822795-01 to ELI, it may not necessarily reflect the views of the agency, and no official endorsement should be inferred.*

*The opinions expressed here do not represent those of BNA, which welcomes other points of view.*

#### **I. Introduction**

This report examines whether the major U.S. emissions trading programs for air pollutants have contributed to elevated emissions concentrations in specific areas, also known as pollution "hot spots." Environmentalists have been concerned about the potential for emissions trading programs to create such concentrations or hot spots, as have advocates of environmental justice, who have voiced such concerns as a basis for opposing emissions trading programs.<sup>1</sup>

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<sup>1</sup> See, e.g., Moore, Curtis, *Marketing Failure: The Experience with Air Pollution Trading in the United States* 34 ELR 10,281 (March 2004); Johnson, Stephen: *Economics vs. Equity: Do Market-based Environmental Reforms Exacerbate Environmental Justice?* 56 Wash. & Lee L. Rev. 111 (1999).

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This report is the first to comprehensively examine the actual emissions data from the major emissions trading programs, which primarily affect emissions of sulfur dioxide and nitrogen oxides from power plants:

- Phase I of the SO<sub>2</sub> Acid Rain Program (1995-1999);
- Phase II of the SO<sub>2</sub> Acid Rain Program (starting in 2000); and
- Ozone Transport Commission (OTC) NOx Budget Program (1999-2002).

In addition to these three major emissions cap and allowance trading programs, we also examine NOx credit trading programs in several states.

This report first examines the hot spot issue from a regional perspective, addressing the chief concern voiced at the initiation of the acid rain SO<sub>2</sub> trading program: whether the increased flexibility allowed by trading would result in disproportionately greater emissions from Midwestern sources, affecting sensitive ecosystems in downwind areas to the east. For the OTC NOx program we examine the data by state to determine whether there were in fact regional shifts of emissions with trading.

Secondly, we attempt to determine the effects of trading on a more local level by examining plant-level data to

see whether the trading programs caused reductions homogeneously with regard to plant size, or caused disproportionate emissions reductions at plants with relatively high or low emissions.

The objective evaluation of the hot spot issue is important because emissions trading programs create the opportunity to attain pollution reduction goals at lower cost through a market-based implementation mechanism.<sup>2</sup> The cap-and-trade programs combine a stringent environmental standard—the cap—with a very high-integrity trading system that increases compliance options. This creates efficiency, and the major cap-and-trade programs have been credited with substantially lowering compliance costs in comparison to traditional rate-based standards.<sup>3</sup> By lowering costs, the programs can benefit the environment by allowing politicians to set standards that achieve even greater reductions. In addition, some authors assert that emissions cap-and-trade programs create a fundamentally better regulatory system for regional pollutants that promotes innovation, creates continuous drivers for cleaner production, and are easily enforced.<sup>4</sup> These benefits could be lost if inaccurate perceptions about trading systems discourage their use where appropriate.

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<sup>2</sup> See, e.g., Tietenberg, T.H., *Emissions Trading: An Exercise in Reforming Pollution Policy* (Resources for the Future, Washington, D.C., 1985); Harrison, David, *Tradable Permits for Air Pollution Control*, in *International Yearbook of Environmental and Resource Economics* 2001 (2001).

<sup>3</sup> See, A. Denny Ellerman et al., *Markets for Clean Air: The U.S. Acid Rain Program* (2000); Curtis Carlson, Dallas Burtraw, Maureen Cropper, and Karen L. Palmer, *Sulfur Dioxide Control by Electric Utilities: What Are the Gains from Trade?* 108 *Journal of Political Economy* 1292 (2000).

<sup>4</sup> Authors point out that cap-and-trade programs guarantee emissions reductions, permanently cap emissions, create zero growth in emissions from new sources, allow greater scope for compliance through cleaner fuels and clean production technologies, increase compliance levels to virtually 100 percent, and greatly lower compliance costs. See generally, Ellerman, Denny, Paul Joskow and David Harrison, *Emissions Trading in the U.S.: Experience, Lessons, and Considerations for Greenhouse Gases*, Pew Center on Global Climate Change, Arlington, Va. (May, 2003) [available at <http://www.pewclimate.org>]; Swift, Byron, *How Environmental Laws Work: An Analysis of the Utility Sector's Response to Regulation of Nitrogen Oxides and Sulfur Dioxide Under the Clean Air Act*, 14 *Tulane Env'tl. L.J.* 309 (Summer 2001) [available at <http://www.epa.gov/airmarkets/articles/index.html>].

## II. Emissions Trading Systems

Emissions trading programs provide flexibility to regulated sources that must meet a common environmental standard. Trading systems allow sources that emit pollution below an allocation level or an environmental standard to sell or transfer their reductions to other sources, which may then emit above the level or standard. The flexibility afforded by trading reduces compliance costs by allowing sources that can reduce emissions more cheaply to transfer allowances or credits to other sources facing higher costs.<sup>5</sup> This article assesses the impact of such spatial<sup>6</sup> trading systems with regards to emissions concentrations or hot spots.

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<sup>5</sup> See generally, U.S. EPA, *Clearing the Air: The Truth About Capping and Trading Emissions*. EPA 430F-02-009 (May 2002); Ellerman, A. Denny, David Harrison, *Emissions Trading in the U.S.: Experience, Lessons, and Considerations for Greenhouse Gases*. Pew Center for Global Climate Change (Arlington, Va., May 2003); Haites, Erik, *An Emerging Market for the Environment: A Guide to Emissions Trading* (U.N. Environment Program, 2002) [see <http://www.ucee.org/ETguide/GuideEmissionsTrading.pdf>].

<sup>6</sup> This article refers to trading in this spatial sense of a transfer of emissions tons between different sources and examines its effects with regards to emissions concentrations. The spatial trading of allowances or credits is to be distinguished from temporal trading, such as banking, which has the effect of moving a ton of emissions from one year to another.

No assessment of emissions trading can be done without understanding its three fundamentally different forms—emissions cap and allowance trading (cap-and-trade) programs, emissions averaging programs, and project-based emissions credit programs.<sup>7</sup> Most of our analysis deals with the major cap-and-trade systems, which both reduce emissions and create a fundamentally different compliance system for sources than traditional technology-based rate standards. They also have a very high-integrity allowance trading system that, because of the cap, assures a decline in total emissions from affected sources. Averaging and credit systems, however, are grafted onto existing compliance systems and differ from cap-and-trade programs in many ways. These three programs differ so significantly in their environmental and economic effects that they should be considered distinct types of regulatory programs and not lumped together as trading programs.

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<sup>7</sup> See generally, EPA, *Three Forms of Emissions Trading*. Clean Air Markets Update, Winter 2002.

### A. Emissions Cap and Allowance Trading Programs

Most of our analysis concerns the Acid Rain Program and the Northeastern OTC NO<sub>x</sub> Program, both cap-and-

trade programs. Under this approach, an overall emissions cap is established over a large region, creating a strict regulatory standard that permanently reduces emissions. All affected sources are then allocated allowances,<sup>8</sup> which represent their share of the total cap, and can trade allowances with each other for compliance purposes. New sources are typically not provided with any allowances, but must obtain them from existing sources, leading to essentially a zero new source standard.<sup>9</sup>

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<sup>8</sup> Each allowance typically represents one ton of a pollutant that may be emitted in a given year.

<sup>9</sup> Note that several states in the OTC program did allocate a small portion of allowances to new sources.

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The cap-and-trade approach fundamentally changes the regulatory system away from traditional end-of-pipe rate-based standards and into an overall performance system.<sup>11</sup> These programs have been shown to reduce the costs of compliance to half or less of the cost of traditional rate-based standards. They can also transform business compliance behavior towards a pollution prevention response and away from installing end-of-pipe controls, broaden and strengthen the context for innovation, greatly reduce administrative costs, and create almost 100 percent compliance.<sup>10</sup> Cap-and-trade programs also establish an extremely credible form of allowance trading based on rigorous monitoring that has high integrity because the cap prevents trading from ever leading to excess emissions.

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<sup>11</sup> Traditional environmental regulations under the Clean Air Act have been established as technology-based rate standards measuring the concentration or percentage of a pollutant in end-of-pipe emissions. See, for example, air standards such as Reasonably Available Control Technology (RACT) for existing sources, Best Available Control Technology (BACT) for new sources, and Maximum Achievable Control Technology (MACT) for hazardous pollutants. 42 U.S.C. §§7502(c)(1), 7475(a)(4), 7412(g)(2)(A) (1994). Rate standards have been shown to be poor performance standards because they significantly restrict the range of technology choices available for compliance, provided limited incentives for innovation and improvement, do not encourage shifts to cleaner technology and tend to freeze innovation. See, EPA, Pub. No. EPA-101/N-91/001, Permitting and Compliance Policy: Barriers to U.S. Environmental Technology Innovation 39 (1991); Swift, Byron, Environmental Law Institute, *How Environmental Laws Work: An Analysis of the Utility Sector's Response to Regulation of Nitrogen Oxides and Sulfur Dioxide Under the Clean Air Act*, 14 Tulane Env'tl. L.J. 309 (Summer 2001) [available at <http://www.epa.gov/airmarkets/articles/index.html>].

<sup>10</sup> For evaluations of the SO<sub>2</sub> program, see *supra* notes 3 and 4.

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### **B. Emissions Credit Trading Programs**

At the other end of the spectrum are credit trading programs, which are grafted onto existing regulatory programs, such as traditional emissions rate regulations under the Clean Air Act. These are voluntary programs in which sources undertake projects that create quantifiable pollution reductions over and above their existing permitted levels or past emissions levels. The sources receive credits for these reductions, which they may then sell or transfer to other sources for compliance purposes.

Credit trading programs generally generate fewer economic and environmental benefits when compared to other trading programs. Some of the reasons are that there is no change in the underlying compliance system, fewer tons are available to be traded, and more regulatory procedures are needed, generating fewer economic gains. Also, because credit programs are used with existing permitting programs that typically do not require continuous emission monitors, they also have less reliable reporting and monitoring of emissions than cap-and-trade programs since firms can select which projects to present, credit trading systems have an inherent weakness in allowing firms to derive credit for projects that they might have done anyway, potentially increasing overall emissions. However, credit trading systems may be useful when system-wide approaches, such as cap-and-trade or averaging, are infeasible. A recent analysis provides best practices for credit programs, while noting they have lower integrity than cap-and-trade programs.<sup>12</sup>

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<sup>12</sup> See Environmental Law Institute, *Emission Reduction Credit Trading Systems: An Overview of Recent Results and an Assessment of Best Practices*, Environmental Law Institute (October 2002); see also Dudek, Daniel & John Palmisano, *Emissions Trading: Why Is This Thoroughbred Hobbled?*, 13 Colum. J. Env'tl. L. 217 (1988).

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### **C. Emissions Averaging Programs**

In between these two systems are emissions averaging programs, in which a rate-based "average," or standard, is established for a group of sources. Individual sources that emit below the average emissions rate can earn credits that can then be sold or transferred to sources that emit above the average rate. Averaging systems can be used either with a uniform rate standard or technology-based rate standards, although the use of a uniform standard may promote cleaner technologies.<sup>13</sup>

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